

29-Un36240

4:1-4

For July

Nevada State Library

Vol. I, Number 4
August 1984

MAR 2 1986

Documents Section

Office:
226 Mackay Science
(702) 784-6921Mail:
John W. James, SC
Dept. of Geography
University of Nevada
Reno, Nevada 89557SYNOPSIS

Except for parts of southern and eastern Nevada, where cloud cover and rainfall was unusually prevalent, temperatures averaged above normal during July.* In fact, early in the month the States all-time maximum temperature of 122° was tied at Las Vegas Wash. Precipitation was well above normal in all but Northwest Nevada, with several locations having the wettest July on record. Caliente's 5.36" of rain was the greatest there for any month since records began in 1910.

TEMPERATURE

Because of a very warm first half of the month, temperatures averaged above normal in most of Nevada. In some areas of the State where rainfall was unusually heavy temperatures were below normal. Largest departures were at Fallon (+5.4°F.), Yerington (+5.0°F.) and Incline (+4.2°F.) in Northwest Nevada, with Ely (-3.0°F.) and Las Vegas (-2.9°F.) being the coolest with respect to normal.

The most noteworthy occurrence temperaturewise during July was the extremely hot weather of July 4th week with several locations on the Colorado River and around the shores Lakes Mead and Mohave recording temperatures at 120° plus. In fact, on July 5th Las Vegas Wash reached 122°, tying the all-time State record for any month, set at Overton (on Lake Mead in June 1954, and at Leeland (near Lathrop Wells in Southern Nye County) in August 1914. Temperatures for the locations with 120° readings on July 4th and 5th are listed below.

<u>STATION</u>	<u>DATE</u>	<u>MAXIMUM & MINIMUM</u>	
Las Vegas Wash	July 4th	120	91
	July 5th	122	86
Echo Bay	July 4th	118	86
	July 5th	121	86
Overton Beach	July 4th	120	83
	July 5th	121	80
Cottonwood Cove	July 4th	121	87
	July 5th	118	82

*Normals based on 1951-80 period.

PRECIPITATION

Precipitation during July was well above normal in all but Northwest Nevada. In fact, at least 8 locations set new records for July precipitation. They were as follows:

JULY

<u>STATION</u>	<u>NORMAL</u>	<u>JULY 1984</u>	<u>PREVIOUS WETTEST JULY</u>	
Owyhee	.36"	2.33"	1.08"	1916
Mountain City	-	2.43"	1.69"	1970
Winnemucca	.18"	1.74"	1.55"	1913
Ely	.65"	2.11"	1.51"	1952
Tonopah	.57"	2.33"	1.49"	1950
Caliente	.92"	5.36"	2.25"	1941
Las Vegas	.48"	2.48"	1.95"	1976
Searchlight	.88"	4.97"	2.97"	1936

In addition, Battle Mountain, with 1.56", recorded the second wettest July since records began in 1891. July 1913, with 1.64", was the wettest. At Caliente in Lincoln County July was the wettest of any month since records began there in 1910. The previous wettest month was December 1947 when 3.76" fell, over 1½" less than was recorded in July 1984!

Very heavy, short-duration rainfall associated with severe thunderstorm activity was responsible for the extremely wet conditions. For example, of the Las Vegas total of 2.48", 1.87" occurred in just a 24 minute period on July 29th! At Laughlin, in the southernmost tip of Nevada 1.70" of the 2.51" total occurred in just a short time on the 22nd. Nellis A.F.B. near Las Vegas also had a downpour of 2.50" on the 22nd. Las Vegas Wash had 2.27" that same day. These Southern Nevada short period totals represent about 3/4 of the average annual precipitation! At the other end of the State the situation was the same with .70" of the Winnemucca total of 1.74" coming in 30 minutes on July 30th.

The extreme western portion of Nevada was too far west to be effected by much of the moist sub-tropical air that brought the heavy rain, so rainfall totals were generally below normal. Local intense rainfall did manage to effect the Reno area on the 23rd when over ½ inch fell in about ½ hour at some locations. The Tahoe Basin missed even this, so that only .12" of rain fell at Nevada's driest location this July, 7,380 foot Daggett Pass near South Lake Tahoe, for one of the driest Julys in several years.

SEVERE WEATHER

July 11 - Strong winds - Clark County - Southern Nevada

Thunderstorms brought unofficial reports of winds between 70 and 90 m.p.h. to Callville Bay and Echo Bay Marinas on Lake Mead near Las Vegas. An estimated 65 boats were sunk and 125 damaged, plus docks and facilities were damaged. All told about \$2 million in damage was the result. In Las Vegas, 25 miles west, winds were officially measured at 52 m.p.h. knocking out power to 20,000 customers for up to 5 hours.

July 18 - Heavy rain, flash floods - Lyon County - Northwest Nevada,
Esmeralda County - Central Nevada

Thunderstorms caused flash flooding in parts of Fallon, Fernley, and Stagecoach in Lyon County, also causing temporary closure of some roads and highways in the County. Between 2 and 4" of rain fell in less than 3 hours.

Heavy thunderstorms and rain in the nearby White Mountains caused highway closures near Dyer in Esmeralda County.

July 21 - Heavy rain, flooding - Clark County - Southern Nevada

Thunderstorms caused heavy rain near Henderson, just south of Las Vegas. Street, road and highway flooding resulted, along with damage to a mobile home park.

July 22 - Heavy rain, flooding, tornado - Clark and Lincoln Counties -
Southern and East Central Nevada

A severe thunderstorm outbreak brought intense short duration rainfall to ground already saturated by an unusually wet July, causing flash floods, loss of life, and much property damage in the Vegas and Moapa Valley areas, and around Pioche in Lincoln County. Hundreds were evacuated in Moapa Valley as 150 homes and many trailers were flooded in Overton, Logandale, Glendale and Moapa, and a Union Pacific railroad bridge was washed out. Many streets were flooded in Las Vegas and Vegas Valley, with one person drowned and 2 missing. Several thousand homes were without power for a time. Streets in Pioche in Lincoln County were also flooded. Tornadoes were sighted east of Boulder City near Lake Mead, near Pioche and in the Moapa Valley. Some 24 hour rainfall totals - Nellis A.F.B. near Las Vegas - 2.50" (most of which fell in a few hours), well over half the average annual amount; Las Vegas Wash - 2.27", Mt. Charleston - 2.16", Laughlin - 1.70", and Callville Bay - 1.51". Damage will run "in the millions".

July 23 - Heavy rain, some flooding - Reno-Sparks - Washoe County -
Northwest Nevada

Thunderstorms caused brief heavy rains (between 1/2 and 1") and hail up to 1/2" in diameter, flooding some streets and intersections and causing some power outages.

July 26 - Heavy rain, flash flooding - Lincoln County

Thunderstorms caused flash floods with up to 5 feet of water and mud over U.S. Highway 93 near Caliente.

July 28 - Heavy rain, flooding, funnel clouds - Las Vegas - Southern Nevada

Severe thunderstorms with brief very heavy rain flooded Vegas Valley streets for the 3rd time in a week. 1.87" of rain was recorded in 24 minutes at the Las Vegas National Weather Service Office at McCarran International Airport (almost half the average annual amount of 4.19"), closing the airport for 20 minutes because of flooded runways. Water was waist deep in the airport parking lot, with 6-8 inches in the

Passenger Lounge. The heavy rains also caused 2 commercial building roofs to collapse and damaged several streets and bridges as water was 3-6 feet deep in several places. Two funnel clouds were sighted south of the city. Damage will be in the millions according to local offices.

July 30 - Heavy rain, flooding - Hawthorne - Mineral County - West Central Nevada

Heavy rains from thunderstorms in nearby mountains brought water, mud, and debris into about 1/3 of the town, and for a time closed U.S. 95 north to Reno and south to Las Vegas. Also the highway to Lee Vining, California was closed by mud. Residents called it the worst storm in 40 years.

July 31 - Heavy rain, flash flooding - Central Nevada

Thunderstorms caused heavy rain and brought 1 to 2 feet of water over U.S. Highway 6 between Ely and Tonopah. Some street flooding in Ely with little damage. Winnemucca .70" in ½ hour.

John W. James
State Climatologist for Nevada

JULY 1984 PRELIMINARY CLIMATOLOGICAL DATA

<u>LOCATION</u>	<u>MAX</u> <u>MEAN</u>	<u>MIN</u> <u>MEAN</u>	<u>MO.</u> <u>MEAN</u>	<u>DEPART</u>	<u>MAX</u>	<u>MIN</u>	<u>PRECIP</u>	<u>AVERAGE</u>	<u>DEPART</u>
<u>Northwest</u>									
Carson City	90.9	53.0	72.0	+2.3	2nd 4th 98	15th 10th 46	.74	.28	+.46
Daggett Pass	77.7	52.3	65.0	--	2nd 85	22nd 44	.12	--	--
Fallon NAS	96.6	60.6	78.6	+5.4	4th 106	10th 46	.53	.21	+.32
Glenbrook	80.9	53.7	67.3	+2.1	4th 5th 88	10th	.30	.42	-.12
Incline	87.8	52.7	70.3	+4.2	3rd 4th 96	22nd 46	.29	.49	-.20
Pyramid Lake	89.4	63.3	76.4	--	7th 98	22nd 53	--	--	--
Reno-AP	92.4	52.5	72.5	+3.0	4th 101	9th 47	.45	.30	+.15
Reno-UNR	92.0	56.4	74.2	--	4th 100	1st 49	.78	--	--
Virginia City	85.6	61.8	73.7	+3.1	3rd 94	23rd 52	.39	.42	-.03
Winnemucca	92.1	48.4	70.3	-1.7	17th 100	9th 42	1.74	.18	+1.56
Yerington	96.4	57.5	77.0	+5.0	4th 100	9th 48	1.82	.32	+1.50
<u>Northeast</u>									
Austin							2.08	.63	+1.45
Battle Mtn.	91.2	53.5	72.4	+2.0	5th 101	11th 43	1.56	.30	+1.26
Elko	90.3	53.9	72.1	+2.0	5th 99	10th 43	1.04	.33	+.71
Ely	85.5	43.6	64.6	-3.0	6th 97	10th 39	2.11	.65	+1.46

July Preliminary Climatological Data (Continued)

<u>LOCATION</u>	<u>MAX</u> <u>MEAN</u>	<u>MIN</u> <u>MEAN</u>	<u>MO.</u> <u>MEAN</u>	<u>DEPART</u>	<u>MAX</u>	<u>MIN</u>	<u>PRECIP</u>	<u>AVERAGE</u>	<u>DEPART</u>
Owyhee	83.9	54.6	69.3	+1.0	5th 94	1st 40	2.33	.36	+1.97
<u>So. Central</u>									
Caliente	89.4	59.8	74.6	-1.3	11th 100	17th 23rd 56	5.36	.92	+4.44
Hawthorne	93.6	63.8	78.7	+1.7	4th 7th 101	29th 31st 58	.88	.31	+5.57
Tonopah	89.8	61.3	75.6	+1.9	4th 5th 100	24th 54	2.33	.57	+1.76
<u>Southern</u>									
Boulder City	98.8	76.4	86.7	-2.1	5th 6th 111	23rd 63	1.98	.49	+1.49
Las Vegas	101.5	73.3	87.4	-2.9	5th 6th 112	28th 60	2.48	.48	+2.00
Laughlin	107.6	80.2	93.9	--	4th 121	28th 72	2.51	--	--
Searchlight	--	--	--	--	6th 107	23rd 61	4.97	.88	+4.11